Claims

What is claimed is:

1. A method for media repair of a storage device, comprising:

performing a read operation on the storage device;

detecting a read error;

locking a logical block address on the storage device;

performing a reassign operation on the storage device;

performing a write operation on the storage device; and

unlocking the logical block address.

2. The method of claim 1, wherein the storage device is a non-redundant RAID configuration.

3. The method of claim 1, wherein the read operation is a READ LONG operation.

4. The method of claim 1, wherein the write operation is a WRITE LONG operation.

5. The method of claim 4, wherein the WRITE LONG operation produces invalid ECC data.

6. The method of claim 1, wherein the storage device is a SCSI device.

7. The method of claim 1, wherein the storage device is an IDE device.

8. The method of claim 1, wherein the storage device is an ATA device.

9. The method of claim 1, wherein the storage device is a non-RAID configuration.

10. A method for media repair of a storage device, comprising:

performing a read operation on the storage device;

detecting a signature; and

performing a write operation on the storage device.

11. The method of claim 10, wherein the storage device is a non-redundant RAID configuration.

12. The method of claim 10, wherein the read operation is a READ LONG operation.

13. The method of claim 10, wherein the write operation is a WRITE LONG operation.

14. The method of claim 12, wherein the WRITE LONG operation produces invalid ECC data.

15. The method of claim 10, wherein the storage device is a SCSI device.

16. The method of claim 10, wherein the storage device is an IDE device.

17. The method of claim 10, wherein the storage device is an ATA device.

18. The method of claim 10, wherein the storage device is a non-RAID configuration.

19. A method for media repair of a storage device, comprising:
performing a read operation on the storage device;
locking a logical block address on the storage device;
performing a write operation on the storage device; and
unlocking the logical block address.

20. The method of claim 19, wherein the storage device is a non-redundant RAID configuration.

21. The method of claim 19, wherein the read operation is a READ LONG operation.

22. The method of claim 19, wherein the write operation is a WRITE LONG operation.

23. The method of claim 20, wherein the WRITE LONG operation produces invalid ECC data.

24. The method of claim 19, wherein the storage device is a SCSI device.

25. The method of claim 19, wherein the storage device is an IDE device.

26. The method of claim 19, wherein the storage device is an ATA device.

27. The method of claim 19, wherein the storage device is a non-RAID configuration.

28. A computer system comprising:

a storage device having storage media, the storage device constructed and arranged to perform a read operation;

the storage device further constructed and arranged to detect a read error;

the storage device further constructed and arranged to lock a logical block address on the storage device;

the storage device further constructed and arranged to perform a reassign operation on the storage device;

the storage device further constructed and arranged to perform a write operation on the storage device; and

the storage device further constructed and arranged to unlock the logical block address;

wherein the storage device can detect errors in the storage media during the read operation and write invalid ECC data to prompt replacement of the file being read.

29. The system of claim 28, wherein the storage device is a non-redundant RAID configuration.

30. The system of claim 28, wherein the read operation is a READ LONG operation.

31. The system of claim 28, wherein the write operation is a WRITE LONG operation.

32. The system of claim 28, wherein the WRITE LONG operation produces invalid ECC data.

33. The system of claim 28, wherein the storage device is a SCSI device.

34. The system of claim 28, wherein the storage device is an IDE device.

35. The system of claim 28, wherein the storage device is an ATA device.

36. The system of claim 28, wherein the storage device is a non-RAID configuration.